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(12) **United States Patent**  
Hyon et al.(10) Patent No.: **US 6,168,626 B1**  
(45) Date of Patent: **\*Jan. 2, 2001**(54) **ULTRA HIGH MOLECULAR WEIGHT  
POLYETHYLENE MOLDED ARTICLE FOR  
ARTIFICIAL JOINTS AND METHOD OF  
PREPARING THE SAME**(75) Inventors: **Suong-Hyu Hyon, Uji; Masanori Oka,  
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(\*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

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(51) Int. Cl.<sup>7</sup> ..... **A61F 2/30**(52) U.S. Cl. .... **623/18.11; 623/23.58;  
522/161; 525/333.8**(58) Field of Search ..... **623/18, 16, 23.58;  
522/100, 161, 1; 525/333.8; 264/405, 435**(56) **References Cited****U.S. PATENT DOCUMENTS**

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(57) **ABSTRACT**

An ultra high molecular weight polyethylene molded article for artificial joints has molecular orientation or crystal orientation in the molded article, and is low in friction and is superior in abrasion resistance, and therefore is available as components for artificial joints. Further, the ultra high molecular weight polyethylene molded article for artificial joints can be used as a component for artificial hip joints (artificial acetabular cup), a component for artificial knee joints (artificial tibial insert) and the socket for artificial elbow joints, and in addition to the medical use, it can be applied as materials for various industries by utilizing the characteristics such as low friction and superior abrasion resistance.

**11 Claims, No Drawings**